ORD COMPUTATIONAL TOXICOLOGY WORKSHOP: Research Framework, Partnerships and Program Development

Research Triangle Park
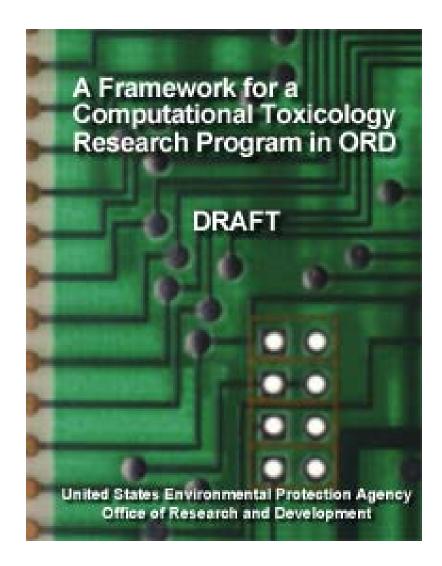
September 29-30, 2003

Computational Toxicology

➢ *Definition:* The application of mathematical and computer models and molecular biological approaches to improve EPA's prioritization of data requirements and risk assessments

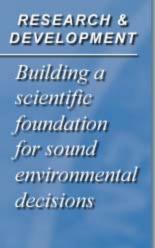➢ *Approach:* A technology-based, hypothesis driven program

COMPUTATIONAL TOXICOLOGY

A Framework for a Computational Toxicology Research Program in ORD

DRAFT

United States Environmental Protection Agency
Office of Research and Development

RESEARCH &
DEVELOPMENT

Building a
scientific
foundation
for sound
environmental
decisions

Workshop Objectives

➢ Communicate the Computational Toxicology Framework to ORD researchers and other Agency scientists

➢ Identify and foster external partnerships

➢ Begin the process of shaping the research program

Workshop Overview

➢ Computational Toxicology Framework

➢ Strategies of Related Organizations

➢ Highlighted Scientific Approaches

➢ Regulatory Needs

➢ Program Formulation

The Past

➢ FY02 Congressional re-direction to provide funds for non-animal alternative testing

➢ FY03 effort continued to use endocrine disruptors as proof-of-concept activity

➢ Leadership by Paul Gilman, AA for ORD, to increase emphasis on Computational Toxicology within EPA

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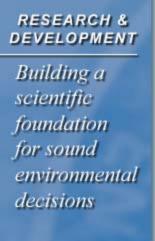
The Present

➢ Infrastructure building
➢ Partnership development
➢ STAR RFAs
➢ SAB Consult, Sept. 12, 2003
➢ ORD Workshop, Sept. 29-30, 2003

Computational Toxicology

Horizontal Integration Across ORD

Prediction
Prioritization
Quantitative Risk Assessment

Building a scientific foundation for sound environmental decisions

Logistics

➢Acknowledgements

➢Evacuation Procedures

➢Facilities

➢Breaks and Lunch

➢Breakout Groups

➢Social

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